

CLAIM AMENDMENTS

Claim 1 (Original): A method of making a biosensor, the method comprising the steps of:

providing an electrically conductive material on a base; and

forming electrode patterns on the base using broad field laser ablation, wherein at least two electrode patterns have different feature sizes.

Claim 2 (Original): The method of claim 1 wherein the conductive material is selected from the group consisting of gold, platinum, palladium, iridium, and indium tin oxide.

Claim 3 (Original): The method of claim 1 wherein the base is a polymer.

Claim 4 (Original): The method of claim 1 wherein the forming step includes removing at least 2% of the conductive material from the base.

Claim 5 (Original): The method of claim 4 wherein at least 50% of the conductive material is removed from the base.

Claim 6 (Original): The method of claim 4 wherein at least 90% of the conductive material is removed from the base.

Claim 7 (Original): The method of claim 1 wherein the laser ablation is performed by a laser apparatus and at least one electrode pattern is formed with pulses of a laser beam from the laser apparatus.

Claim 8 (Original): The method of claim 1 wherein at least one electrode pattern is an interlacing pattern.

Claim 9 (Original): The method of claim 1 wherein at least one electrode pattern has at least one edge extending between two points, a standard deviation of the edge from a line extending between two points is less than about 6 μ m.

Claim 10 (Original): The method of claim 9 wherein the standard deviation is less than about 2 μ m.

Claim 11 (Original): The method of claim 9 wherein the standard deviation is less than about 1.0 μ m.

Claim 12 (Original): The method of claim 1 wherein the at least one electrode pattern has electrode fingers that cooperate with one another to define an electrode gap having a pre-determined width value, a standard deviation of the gap from the width value is less than about 4 μ m.

Claim 13 (Original): The method of claim 12 wherein the gap standard deviation is less than about 3 μm .

Claim 14 (Original): The method of claim 12 wherein the gap standard deviation is less than about 1.0 μm .

Claim 15 (Original): The method of claim 1 further comprising the step of placing a reagent on at least one of the electrode patterns.

Claim 16 (Original): The method of claim 1 wherein the laser ablation is performed by a laser apparatus and at least one electrode pattern is formed with a single pulse of a laser beam from the laser apparatus.

Claim 17 (Original): The method of claim 1 wherein the laser ablation is performed by a laser apparatus that produces a laser beam having a dimension that is greater than a feature size of at least one electrode pattern.

Claim 18 (Original): The method of claim 1 wherein at least one electrode pattern is formed in less than about 0.25 seconds.

Claim 19 (Original): The method of claim 1 wherein at least one electrode pattern is formed in less than about 50 nanoseconds.

Claim 20 (Original): The method of claim 1 wherein at least one electrode pattern is formed in about 25 nanoseconds.

Claims 21-48 (Cancelled).

Claim 49 (Original): A method of making a biosensor, the method comprising the steps of:

providing an electrically conductive material on a base; and

partially removing the conductive material using laser ablation from the base so that less than 90% of the conductive material remains on the base and at least one electrode pattern is formed from the conductive material, the at least one electrode pattern having an edge extending between two points, a standard deviation of the edge from a line extending between two points being less than about 6 μm .

Claim 50 (Original): The method of claim 49 wherein the standard deviation is less than about 2 μm .

Claim 51 (Original): The method of claim 49 wherein the standard deviation is less than about 1 μm .

- Claim 52 (Original): The method of claim 49 wherein at least one electrode pattern is formed in less than about 0.25 seconds.
- Claim 53 (Original): The method of claim 49 wherein at least one electrode pattern is formed in less than about 50 nanoseconds.
- Claim 54 (Original): The method of claim 49 wherein said electrode pattern is formed in about 25 nanoseconds.
- Claim 55 (Original): The method of claim 49 wherein the at least one electrode pattern has electrode fingers that cooperate with one another to define an electrode gap having a pre-determined width value, a standard deviation of the gap from the width value is less than about 4 μm .
- Claim 56 (Original): The method of claim 55 wherein the gap standard deviation is less than about 3 μm .
- Claim 57 (Original): The method of claim 55 wherein the gap standard deviation is less than about 1.0 μm .
- Claim 58 (Original): The method of claim 49 wherein less than 50% of the conductive material remains on the base.
- Claim 59 (Original): The method of claim 49 wherein less than 10% of the conductive material remains on the base.
- Claim 60 (Original): The method of claim 49 wherein the conductive material is removed using laser ablation.
- Claim 61 (Original): A method of making a biosensor, the method comprising the steps of:
- providing an electrically conductive material on a base,
 - forming electrode patterns on the base using broad field laser ablation, wherein at least two electrode patterns have different feature sizes, and
 - extending a cover over the base, the cover and base cooperating to define a sample-receiving chamber and at least a portion of the electrode patterns are positioned in the sample-receiving chamber.
- Claim 62 (Original): The method of claim 61 wherein the conductive material is selected from the group consisting of gold, platinum, palladium, iridium, and indium tin oxide.

- Claim 63 (Original): The method of claim 61 wherein the base is a polymer.
- Claim 64 (Original): The method of claim 61 wherein the forming step includes removing at least 2% of the conductive material from the base.
- Claim 65 (Original): The method of claim 64 wherein at least 90% of the conductive material is removed from the base.
- Claim 66 (Original): The method of claim 61 wherein the laser ablation is performed by a laser apparatus and at least one electrode pattern is formed with pulses of a laser beam from the laser apparatus.
- Claim 67 (Original): The method of claim 61 wherein at least one electrode pattern is an interlacing pattern.
- Claim 68 (Original): The method of claim 61 wherein at least one electrode pattern has at least one edge extending between two points and a standard deviation of the edge from a line extending between two points is less than about $2\mu\text{m}$.
- Claim 69 (Original): The method of claim 68 wherein the standard deviation is less than about $1.5\mu\text{m}$.
- Claim 70 (Original): The method of claim 61 wherein the at least one electrode pattern has electrode fingers that cooperate with one another to define an electrode gap having a pre-determined width value, a standard deviation of the gap from the width value is less than about $2\mu\text{m}$.
- Claim 71 (Original): The method of claim 70 wherein the standard deviation is less than about $1.75\mu\text{m}$.
- Claim 72 (Original): The method of claim 61 further comprising the step of placing a reagent on at least one of the electrode patterns.
- Claim 73 (Original): The method of claim 61 wherein the laser ablation is performed by a laser apparatus that produces a laser beam having a dimension that is greater than a feature size of at least one electrode pattern.
- Claim 74 (Original): The method of claim 61 wherein at least one electrode pattern is formed in less than about 50 nanoseconds.
- Claim 75 (Original): The method of claim 61 wherein said electrode pattern is formed in about 25 nanoseconds.
- Claims 76-100 (Cancelled).